material foaming with conventional method



first cooling step



air-circulating oven post-cure step



second cooling step

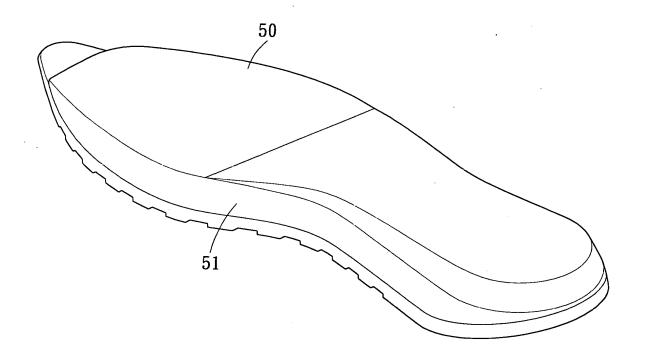


cutting foamed soles into desired shape (wastes produced after cutting occupy about 20% of the raw materia)



semi-finished products

F I G. 1 PRIOR ART



F I G. 2 PRIOR ART

inputting pre-calculated foaming material in mold



forming the material in mold



cooling action



semi-finished product

compressing portions "a" and "b" with middle plate



cleaning off the scraps of the raw material after compression



inputting foaming material in mold



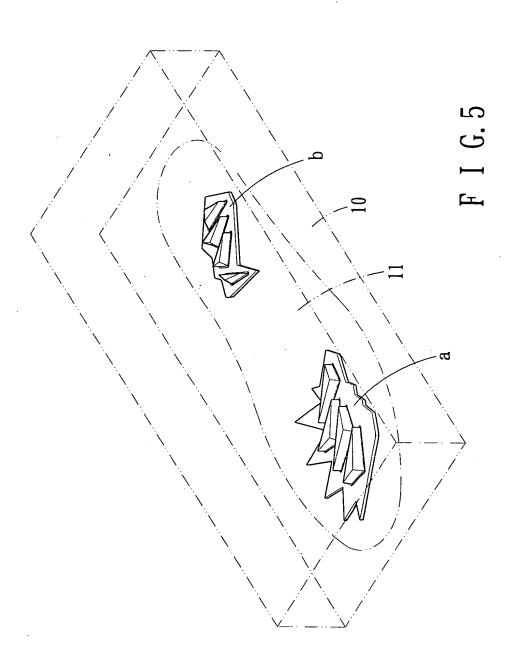
in mold foaming in a vacuum platform for 5 minutes at centigrade 150 deg

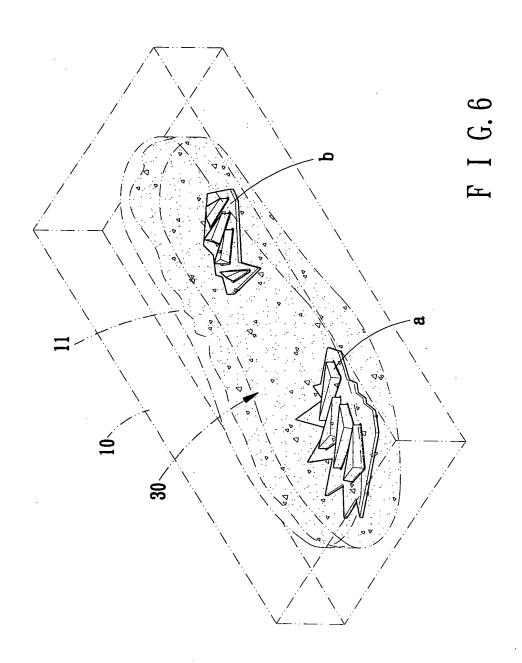


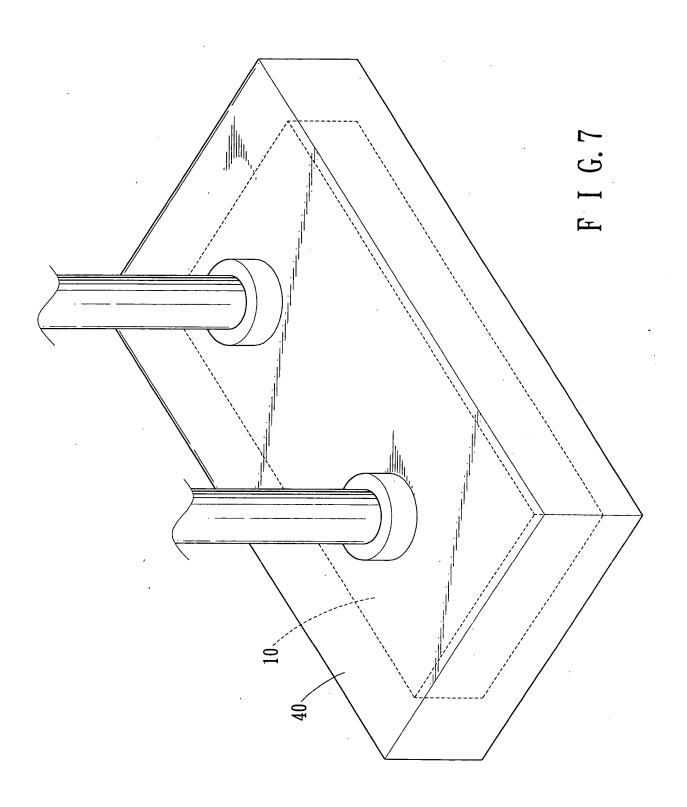
cooling the sole

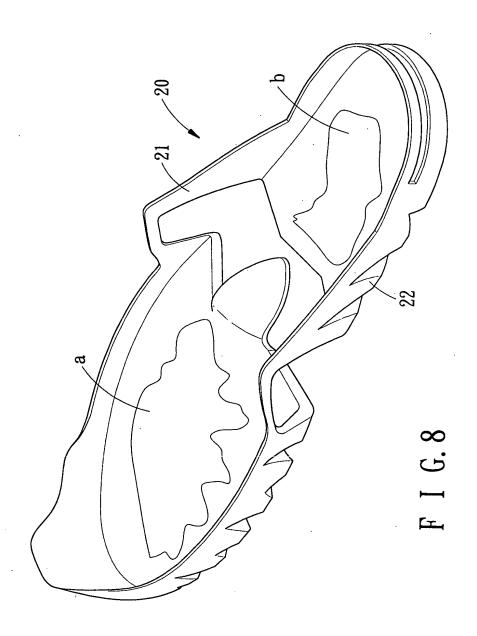


semi-finished products









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